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OF THE

INTERNATIONAL ASSOCIATION OF AGRICULTURAL
LIBRARIANS & DOCUMENTALISTS

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QUARTERLY BULLETIN
OF THE
INTERNATIONAL ASSOCIATION OF AGRICULTURAL
LIBRARIANS & DOCUMENTALISTS

BULLETIN TRIMESTRIEL DE L'ASSOCIATION
INTERNATIONALE DES BIBLIOTHECAIRES
ET DOCUMENTALISTES AGRICOLES

VIERTELJAHRSSCHRIFT
DER INTERNATIONALEN GESELLSCHAFT
LANDWIRTSCHAFTLICHER BIBLIOTHEKARE &
DOKUMENTALISTEN

BOLETIN TRIMESTRAL
DE LA
ASOCIACION INTERNACIONAL
DE BIBLIOTECARIOS Y DOCUMENTALISTAS AGRICOLAS

Editor
Rédacteur-en-chef
Schriftleiter
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Harpden, Herts., England

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CONTENTS

	<i>Page</i>
The Library of the Department of Agriculture, Federation of Malaya, Kuala Lumpur. (P. J. Verghese)	75
Index to the World's Beekeeping Literature. (Julia S. Merrill)	79
Theoretical Problems in Agricultural Documentation. (E. Pa-taky)	81
COMMUNICATIONS TO MEMBERS	
Annual Report of IAALD for 1957/58	86
Standing Committee on Agricultural Documentation (West Germany)	87
Two New Journals	87
Working Committee reports	89
BIBLIOGRAPHICAL NEWS	
Bibliographies - Agriculture	90
Periodicals	112
Dictionaries	119
Reference Works	120
BOOK REVIEWS	121
GENERAL AND PERSONAL INFORMATION	
Exchange: Offers and Requests	123
Institutions and Individuals	124
Forthcoming Congresses	125
Abbreviations: Supplement no. 3 (F. A. Buttress, Cambridge)	126
A Note on this Quarterly Bulletin	139

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THE LIBRARY OF THE DEPARTMENT OF AGRICULTURE, FEDERATION OF MALAYA

BY

P. J. VERGHESE, *Kuala Lumpur*

History

The Department of Agriculture for the Federated Malay States comprising the four states, Negri Sembilan, Selangor Pahang and Perak, was instituted in 1905. Prior to this the services of the Gardens Department, Straits Settlements, at Singapore, were invoked for the purpose of assisting agriculturists in the Federated Malay States. The official appointment of the first Director of Agriculture and Government Botanist, FMS, was made in England and one of the tasks of this officer before leaving for Malaya was to purchase such books as were essential to the work of the Department. One of the duties of this Department was to act as a bureau of information on agricultural matters. In 1907, a suitable place was provided for a small library and the Government Mycologist began arranging and cataloguing the books and pamphlets in the library.

Towards the close of the year 1919 the agricultural work in the Straits Settlements, comprising Singapore, Malacca and Penang, was placed in charge of the Department of Agriculture SS and FMS. This Department acted in an advisory capacity to the Unfederated Malay States, comprising Johore, Trengganu, Kelantan, Kedah and Perlis. By the formation of the Malayan Union after World War II and the subsequent institution of the Federation of Malaya, the Department of Agriculture became the administrative centre for all matters connected with agriculture in Malaya, and is now known as the Department of Agriculture, Federation of Malaya.

Staff

The first full-time librarian and translator was appointed in 1925 and with the help of two clerks he carried out the duties of the post till he retired in 1932. As a measure of economy no librarian was appointed till 1939 when a lady doctor, a refugee, was appointed on a much lower salary than the one offered to her predecessor. On the resignation of this lady in 1941, the present librarian was transferred from the King Edward VII College of Medicine, Singapore, where he

had held the post of Librarian for about eleven years. One of the clerks was transferred and this vacancy has not yet been filled. The present staff consists of the Librarian, one clerk and two attendants.

Stocks

The total number of bound volumes in book form is estimated to be about 40,000. There are a considerable number of unbound periodicals and serial publications, mostly kept in metal boxes. The majority of the publications on rubber were transferred to the Rubber Research Institute of Malaya which was established in 1926. The School (now the College) of Agriculture, Malaya, was established in 1931 and a considerable number of publications transferred to this institution was lost during the Japanese occupation. Practically everything in the experimental stations and divisions of the Department was also lost during this period.

The library receives about 520 periodicals and serial publications by subscription and exchange. There are about 1,340 sets of periodicals; a number of these were discontinued in 1932 and 1933 owing to financial difficulties and have never been replaced. There are about 40 volumes of out-of-print periodicals on microfilm. Though the library does not possess a microfilm reader, officers of the Department have access to readers in other Government institutions.

A complete set of the publications of the Department is maintained, as well as those of other institutions, including the Rubber Research Institute, the Forest Research Institute, the Fisheries Department and the Veterinary Department. As far as possible, complete sets of publications of a number of foreign institutions are filed. These include the Bureau of Agriculture, London, the Ministry of Agriculture and Fisheries, London, the United States Department of Agriculture, the Food and Agricultural Organisation and its forerunner, the International Institute of Agriculture. A considerable number of agricultural publications from the British Colonies and Dominions and other foreign agricultural institutions are also received.

Methods of Acquisition

A constant watch is kept for new publications and organisations liable to issue publications in the form of periodicals and reports. The publishers' announcements are useful sources of advance information and reviews in periodicals serve as reminders. Review copies sent to the Publications Officer of the Department of Agriculture are sent to the Librarian. The main sources of acquisition are through purchase and exchange. The Department offers the Malayan Agricultural Journal, Bulletin, Leaflets and Reports. Publications are often donated to the library by officers of the Department when they retire. The Publications Committee of the Department decides

whether or not to include new publications either by purchase or exchange.

Library Service

The Departmental library in Kuala Lumpur is the central agricultural library for the Federation of Malaya, with branches in eleven States, three Federal Experimental Stations, the College of Agriculture and two Agricultural Schools. In addition, each state has its own funds for the purchase of essential books and has a library of its own managed by its State Agricultural Officer. Expenditure for the Experimental Stations is met from Federal Department of Agriculture funds. The College and the Schools have their own funds. In addition to the above there are divisional libraries, ten in number, situated in the offices and laboratories of the Headquarters in Kuala Lumpur. A master catalogue of all these libraries is kept in the main library. The Librarian at the main library advises all these centres on matters connected with library administration and occasional visits are paid by him to these centres. The majority of periodicals received at the Main library are circulated to all these centres. The Forest Research Institute at Kepong is also on the circulation list for certain periodicals.

All periodicals received are scrutinised by the Librarian on receipt and any particularly outstanding item is brought to the attention of any member of staff known to be working on a related problem. Announcements of the publication of new books or periodicals on some specific topic known to be of interest to a particular officer are brought to his notice.

The Librarian issues a Library Bulletin giving information on accessions, publications on order and other matters of interest. This is the usual method of dissemination of information to all officers and librarians in the system.

No abstracting is undertaken by the library staff as this is well covered by the services and publications of the Commonwealth Agricultural Bureaux, the National Agricultural Advisory Service Quarterly Review and other abstracting journals.

Availability

The library is open, without formality, to any one, for reference purposes. Most of the material can be borrowed by other libraries provided it is not in demand by the staff of the Department. The library answers many queries, both written and verbal, and supplies reading lists and bibliographies to readers. Outside enquiries for publications on agricultural matters are usually dealt with in the library, but enquiries of a more technical nature are passed on to the divisions.

Translations of articles in foreign languages are occasionally done outside the Department on payment. Translations into Malay and Chinese are done by the Departmental translators. Photocopying is done internally but there is no copying service normally available to non-government libraries.

The library follows the normal Departmental office hours, but access to the library is possible to senior members of the staff at any time. A separate Issue Register is kept for items borrowed in the absence of the library staff.

Classification and Cataloguing

The following catalogues of the resources of the library are available:

1. Author catalogue of books and pamphlets in card form.
2. Subject catalogue of books and pamphlets in card form.
3. Classified subject catalogue of books and pamphlets in loose-leaf form.
4. List of periodicals and serial publications in loose-leaf form.
5. Title catalogue of periodicals and serial publications on visible indexes.

There is no printed catalogue of the library. Steps are being taken to issue a catalogue of periodical holdings.

Classification

Books and pamphlets are classified according to a system formulated by the present Librarian. This system is a combination of the systems used in the Department of Agriculture, New South Wales, Australia, and the International Institute of Agriculture, Rome. Certain sections have been adapted from the Universal Decimal Classification. The letters of the English alphabet are used for the notation. The principle underlying this scheme is that of specific entry, that is, one place for each topic under which is grouped all its aspects. The main outline of this scheme is applied generally, but those classes which are fully represented in the library, are worked out in detail.

Periodicals and serial publications are not classified, but are arranged on the shelves in numerical order, each title being given a number (subject index cards for serial publications are prepared and incorporated into the subject index cards for books, reprints, and pamphlets). In certain instances a combination of letters and numbers is used to bring together titles for specific reasons. The location of these can be determined by the use of the visible indexes. Unbound periodicals are kept with bound ones, and the latest issue of each current periodicals is displayed on racks provided for this purpose.

INDEX TO THE WORLD'S BEEKEEPING LITERATURE

BY

JULIA S. MERRILL, *Beltsville, Maryland*

More than 30 years ago the Division of Bee Culture of the Bureau of Entomology of the United States Department of Agriculture began a card index of selected references from the world's literature on apiculture and closely related subjects. This Beekeeping Bibliography, as it is familiarly known, was maintained by the Bee Culture Library of the Bureau until 1942, when it became a part of the Department of Agriculture Library. It is known as the Apiculture Unit of the Reference Section. The Beekeeping Bibliography is now maintained as a joint project of the Unit library and the Bee Culture Section of the Field Crops Insects and Bee Culture Research Branch, Entomology Research Division, at Beltsville, Maryland.

The library has been housed with the apicultural research workers since the inception of the Beekeeping Bibliography. We believe this close relationship has resulted in a more complete understanding of the needs, desires, and problems of each group than would have been possible if each operated separately. The library staff is kept informed of research projects and of the varying interests of the apiculturists, bacteriologists, entomologists, and other scientists, and has thus been able to procure material of substantial value and to keep it pertinent to the needs of the workers.

The material reviewed and included in this index encompasses many fields. Beekeeping covers a much broader area than simply honey production. The bee business is an essential cog in the agricultural economy of the United States, and there are now about 425,000 persons keeping bees in this country. The value of bees for pollination is 20 times as great as for the annual return of honey, which was 214,524,000 pounds in 1956. In addition to their value to agriculture, bees have provided a source of pleasure and stimulation to the hobbyist, amateur, and back-lot beekeeper.

It is perhaps not generally realized that the use of insecticides has contributed to the annihilation of many insect pollinators. In earlier years agriculture depended on these insects for seed crops such as alfalfa, clover, and many of the vegetables, as well as for production of most of the deciduous fruits, such as apples and pears. Today pollination is almost completely dependent on the honey bee for ade-

quate production of such crops. There is great interest in the insecticide problem here and abroad, and many of the references added to the index relate to this subject.

At one time there were about 135 periodicals devoted exclusively to bee culture. Now that figure has dropped to about 70. Most of the journals are published by beekeeper's associations, although in the United States the two leading periodicals are house organs of bee supply firms. In France and Germany, for example, there are numerous associations and many journals - and so it is throughout Europe. The countries of the Far East are also represented in the bee literature received by the Apiculture Unit.

Medical, biological, agricultural, and other non-beekeeping journals; abstract and review publications; and the Department of Agriculture Library's monthly *Bibliography of Agriculture* are received regularly, and selected articles are added to the Beekeeping Bibliography. Articles are not indexed from abstract or review journals until all efforts to obtain the original have failed.

There are approximately 80,000 references in the index, and two files are maintained, author and subject. Bibliography cards are prepared once a month and are supplied to the field laboratories of the Bee Culture Section, located in various parts of the country. The cards used are large (5 x 8 inches) to allow for the inclusion of a summary or short translation when desired. French, German, Italian, and Spanish articles are translated by staff members, and Slavic translations are obtained through other offices. Unfortunately, there is no source for Oriental translations at present.

In addition to the summaries, a separate file of complete translations is maintained in conjunction with the card index. The Apiculture Unit has an agreement to exchange translations with the Bee Research Association in London, England; the Department of Agriculture of Ottawa, Canada; and the Ontario Agricultural College at Guelph. The Bee Research Association is an international organization and the translations sent there are available to scientific personnel throughout the world.

The classification scheme used in filing the references in the Beekeeping Bibliography was evolved by Bee Culture personnel and has been continued in the same pattern with a few refinements. It consists of 28 major headings with over 200 subclasses. The system is, of course, antiquated and needs complete revision, but this will necessitate a great deal of manual labor. We hope that some day enough help will be available to give it the attention it needs.

THEORETICAL PROBLEMS IN AGRICULTURAL DOCUMENTATION

BY

E. PATAKY, *Budapest*

(*Summary of a paper which appeared as Proceedings of the Hungarian National Agricultural Library and Centre for Documentation, 1 (1958).*)

Theoretical questions of agricultural documentation are treated rather sporadically in special literature. Therefore the author found hardly any support for his work in the special literature available, and he lacked also the direct observation given by study-tours abroad. His argument is based upon observations made over eight years in the National Agricultural Library and Centre for Documentation, Budapest, as well as on theoretical literature of documentation in general.

1.

The author starts from the classification of sciences. In the course of development the clear-cut lines delimiting the sciences disappeared. In the same way the agricultural sciences do not form an individual closed unit, but a *complex network* of relations both within and without the field of agricultural science.

These relations are four in kind. The most frequent occur inside the field of agricultural sciences (internal relations No 1), such as the keeping of poultry in batteries or on deep litter. Less frequent, but still fairly numerous, are the relations still formed inside the field of agricultural sciences, though outside the respective special branch of agricultural science (internal relations No 2), e.g. farm management in horticulture. The other relations fall outside the domain of agricultural sciences. Among these the relations having reference to biology (external relations No 1) are dominant, except agricultural economy, which is mainly related to political economy, and agricultural engineering related to mechanics. The relations having reference to other sciences outside the field of agricultural sciences (e.g. mathematics) are the external relations No 2.

Agricultural research is the analysis of these relations. In searching for unknown relations documentation is an indispensable means of information, of rationalization in scientific work. In fact agricultural

documentation has to consider the concrete trends to be followed in recording recent scientific advances, that is it has to keep abreast of the intensity as well as of the changes taking place in the above relations.

In this activity documentation is somewhat aided by the Bradford law of scattering. Internal relations No 1 may be ranged in the Bradford nucleus of periodicals devoted to the subject, the internal relation No 2 into zone No 1, etc. A further aid is the institutional collaboration of scientific agricultural bodies. A third mainstay would be the compilation from time to time in one or other branch of agricultural science of an analysis of the quantitatively and qualitatively weighted relation numbers of the above relations and the establishment of a weighting trend and positive and negative correlations.

2.

Concerning the reasons for the *differences between industrial and agricultural documentation* the author points to the greater general value of achievements in the technical sciences. In agriculture there are lively discussions already on its basic science, biology. And besides, on account of variations in natural and other conditions, agricultural documentation serves primarily the country's agricultural experimentation and not its practical production. In agricultural documentation the need for selection as fitted to the conditions of the country manifests itself more acutely. Further, industrial production and, in consequence, technical and technical documentation are more clearly defined. In agriculture - apart from America and the colonies where monocultural production is being followed - research activity is concentrated on mixed farming which makes agricultural documentation more complex. Furthermore, fixed expenditures being relatively higher in agriculture, documentation is unable to respond promptly to scientific achievements. Consequently, promptness is not a primary requirement of agricultural documentary services. All the same, it ought to be considered that the restrictions imposed by the climatic, soil, etc., conditions are growing less and the chemical, physical, mechanical attainments of a more general value compete more and more with biological factors. Proportionately, the applicability of foreign achievements as interpreted by agricultural documentation is enhanced.

3.

Next, the *necessity for agricultural documentation* is discussed. Documentation is compared with other methods of scientific cognition and the objections raised against it are analysed. The author touches on the provincialist attitude threatening agriculture and

agricultural sciences. Reference is made to the accelerated rate of development in agricultural sciences in the last few decades, pointing out that documentation is the only key permitting access to this rapidly accumulating store of knowledge. It is for small countries especially to take over the achievements attained in the basic sciences of agriculture and to make these part of their national resources.

4.

Agricultural documentation has to meet three kinds of requirements: material, functional and institutional.

The *material requirement* (to the question 'what') refers to the content of the material. In this connection the problem of selection is analysed in detail. Scientific agricultural achievements do not always harmonize with the natural endowments or with the research plans of a certain country. The nearer the scientific information to the pure and to the basic sciences, the larger the coincidence.

The *functional requirement* agricultural documentation has to cope with (the question 'how') consists essentially in dissemination and a differential information retrieval. Concerning the function of dissemination, the author finds it more useful for smaller countries to publish an abstracting periodical containing informative abstracts than a larger number of indicative abstracts. The successful functioning of information retrieval is subject to the fulfilment of six conditions.

As regards the institutional tasks (the question 'who') the requirements to be met by the documentalist in scanning literature are set forth. In larger countries the burdens incident to these requirements are shared with the agricultural research bodies. In smaller countries, however, most of the responsibility of agricultural documentation devolves on the documentalists working at the central agency of agricultural documentation.

5.

The next part discusses *whom agricultural documentation is to serve*. The functional level of documentation must be the same as the level of the original documents, most of which are highly scientific. Consequently, central agricultural documentation has in the first place to serve agricultural experimentation, higher education, high operative management. Apart from these, in the dissemination documentation it has to serve the practical experts working in the field of production and open to scientific advance.

6.

As to the question of *centrally organized documentation* the author thinks that - as compared with industrial documentation - agricul-

tural documentation is compelled to leave out of consideration the lowest level, that is the producing unit - in smaller countries even the second level, the agricultural research institute. In other words it is advisable for smaller countries to organize agricultural documentation centrally, that is, on a national scale, and in the meantime to work for decentralization to the level of agricultural research institutes, thus building up a documentary network.

7.

In discussing the *methods of documentation*, such as prompt information through abstracts on individual sheets, abstracting journals, subject reviews on progress, etc., attention is paid to the specific features characteristic of agricultural documentation. Agricultural documentation services do not have to be as prompt in keeping track of publications as industrial documentation. In the abstracting journals of smaller countries selection should be performed more thoroughly despite limitations in the scientific apparatus.

As regards information, storage problems of the documentary material are dealt with, as well as classification, the question of special bibliographies and subject reviews on progress.

Concerning the problem of translation, reference is made to considerable changes in socialist countries as regards the order of importance of languages (deviation No 1). The number of languages used in agricultural research in smaller countries is increasing considerably (deviation No 2). In consequence, on account of the extensive translation work the process of documentation is prolonged (deviation No 3) and becomes more expensive (deviation No 4). Reference is made also to the language problems of documentary staffs as well as to the tasks to be solved in this field by UNESCO.

8.

As to *efficiency in agricultural documentation*, the author analyses the conditions that are needed for turning universal scientific agricultural literature into knowledge of national value. Theoretical discussion is followed by concrete proposals for examining in how many cases and with what effectiveness intellectual work has benefited another country.

9.

A comparison between *agricultural documentation in capitalist and socialist countries* suggests that the latter seems better established, and, instead of serving capitalist agricultural enterprise is aimed at promoting the agricultural progress of the whole country. Its drawback is that the efficiency and success of documentary activity are often lost sight of.

A supplement contains as Part 1 a survey of documentation bodies in the USSR, Czechoslovakia, Poland, some Western and international organizations (International Institute of Agriculture, FAO, OEEC), Great Britain, Western Germany, the Netherlands, as also of the activities of the International Association of Agricultural Librarians and Documentalists (IAALD).

Part 2 of the supplement reviews the *history of Hungarian agricultural documentation* by analysing the motives of its development. Systematic documentary work in the field of agriculture had its beginning in the interpretation of Soviet scientific literature. The centre of interest being turned to translations made in large quantities, documentation in the narrower sense was relegated to the background. In the next stage of evolution agricultural documentation so far working independently was co-ordinated with the National Library of Agriculture, the library background resulting in a wide abstracting service. Unfortunately, concentration on quantity absorbed the energy of the documentary service. Summer 1957 brought further development in the life of the National Library of Agriculture through the reorganisation of the reproduction service, the co-ordination of the dissemination and retrieval of documentation, the development of subject reviews on progress and the charting of the course of future development.

The present organization of the Library's function and publications are then discussed, supporter by detailed statistics.

Part 3 of the supplement contains nine points laid down by the author for the further development of Hungarian agricultural documentation and for better international co-operation in agricultural documentation.



COMMUNICATIONS TO MEMBERS

ANNUAL REPORT OF THE INTERNATIONAL ASSOCIATION OF AGRICULTURAL LIBRARIANS AND DOCUMENTALISTS (IAALD)

For the year ending September 1958

Since the last report the membership of the Association rose to 340, of which less than one half are individual members, while the rest are institutions, mostly libraries.

The programme of work actually in progress includes such items as a world-wide Directory of agricultural libraries and documentation centres, which is prepared by D. H. Boalch, Librarian of the Rothamsted Experimental Station at Harpenden, Herts, England. More than 3,100 questionnaires have been sent out and are now being returned to the editor at an approximate rate of 20 per cent. It is hoped to complete the text of the Directory and to publish it in 1959. The John Deere Foundation has provided a grant to enable IAALD to publish this Directory.

The Classification Committee reports that the revision of the 'Système de Classification des Sciences Agricoles', published originally by the former International Institute of Agriculture (2d edition 1942), has been started by S. v. Frauendorfer. Important suggestions as to improvements and additions have been received by several members of IAALD. The manuscript of the revised text will be ready by Spring 1959.

With the financial aid of the Council on Economic and Cultural Affairs, Inc., New York, it was possible to publish a sample copy of a new journal to be issued by IAALD in close co-operation with the International Conference of Agricultural Economists. In the field of agricultural economics and sociology no international abstracting service is in existence, a gap which is to be filled, beginning with 1959, by *World Agricultural Economics Abstracts*, a quarterly to be published under the general editorship of Sigmund v. Frauendorfer. The *Quarterly Bulletin of IAALD* is published regularly under the editorship of D. H. Boalch and is about to complete its third annual volume.

Two important bibliographical publications have been published by members of the association, namely:

Blanchard, J. R. and Ostvold, H. *Literature of agricultural research*. Berkeley and Los Angeles, 1958.

Lauche, R. *Internationales Handbuch der Bibliographien des Landbaues*. München, 1957.

The President (F. E. Mohrhardt), the Vice President (S. v. Frauen-dorfer), and the Treasurer (Th. P. Loosjes) of IAALD represented IAALD at the International Conference of scientific Information, Washington, D. C., November 1958.

STANDING COMMITTEE ON AGRICULTURAL DOCUMENTATION (WEST GERMANY)

(reported by W. Gleisberg)

Die auf Einladung des Land- und Forstwirtschaftlichen Forschungsrates zur konstituierenden und ersten Arbeitssitzung vom 18./19.XII.58 in Reinbek b. Hamburg versammelten Dokumentationsfachbearbeiter der Ernährungs-, Landwirtschafts-, Forst- und Holzwissenschaft beschliessen die Begründung eines ständigen Klassifikationsausschusses als beratenden Gremiums der Dokumentationskommission des Land- und Forstwirtschaftlichen Forschungsrates. Arbeitsziel des Ausschusses in Verbindung mit den Dokumentationsfachbearbeitern des Land- und Forstwirtschaftlichen Forschungsrates ist die Koordinierung aller Klassifikationsbestrebungen auf den Gebieten der Ernährungs- und Landwirtschafts-, Forst- und Holzwissenschaft. In diesem Sinne begrüsst der neugebildete Klassifikationsausschuss eine enge Verbindung mit dem Klassifikationsausschuss des Deutschen Normenausschusses durch Einbeziehung in eine neu zu bildende Arbeitsgruppe für Ernährungs- und Landwirtschaft, Forst- und Holzwirtschaft im Klassifikationsausschuss des Deutschen Normenausschusses.

TWO NEW JOURNALS

AGRICULTURAL AVIATION

Quarterly periodical of the European Agricultural Aviation Centre.

During the last decade the use of aircraft in agriculture and forestry has increased considerably throughout the world. The airplane has been shewn to be a powerful weapon in the struggle of man against food shortage, a food shortage caused by the damage done by insects,

diseases and weeds, but which may also have been brought about through exhaustion of the soil when it is insufficiently fertilized.

The new periodical '*Agricultural Aviation*' is a forum for all those who - anywhere in the world - are in some way concerned with the use of aircraft in agriculture and forestry. It aims to keep them posted on any new technical developments in this field: new types of aircraft with the application equipment going with them, agricultural chemicals and fertilizers. Its columns are open to research workers who want to publish articles on their work with aircraft, which are intended for a highly specialized group of readers who may be expected to be interested in such articles.

Although '*Agricultural Aviation*' is published by the European Agricultural Aviation Centre, the contents are by no means limited to agricultural aviation in Europe. On the contrary, as a source of up to date information on a world-wide scale this periodical aims to be the voice of ever developing agricultural aviation. For this reason it is published in two editions: in English and in French.

The first issue, in a very attractive make-up, contains articles on aerial potato spraying in England and forest spraying in Germany, together with descriptions of new types of agricultural aircraft and equipment, and extracts from recent agricultural aviation literature.

Subscription rates per year:

Europe: United Kingdom £ 1.4.-, France frs 1700, Switzerland frs 13,60.

U.S.A. and Canada: \$ 3.50.

Elsewhere: the equivalent of U.S. \$ 3.50 or £ 1.8.-.

Editorial office and administration: 1e v. d. Boschstraat 4, The Hague, Netherlands.

ANIMAL PRODUCTION

The Journal of the British Society of Animal Production

The first issue of this new Journal is to be published early in March, 1959, and it will be published at least twice per year thereafter.

It is intended that the journal will provide an international medium for publishing original work having a direct bearing on the science and practice of animal production. Papers on genetics, husbandry, nutrition, physiology and the inter-relationship of animal and environment will be included. Because many far reaching deve-

lopments derive from work with small animals and work in the purely theoretical field, papers which deal with these will also be included. Reviews of important topics will be published and abstracts of papers read at meetings of the B.S.A.P. will provide a record of work in progress in Britain.

The new journal is sponsored by the British Society of Animal Production and it supersedes the Proceedings of the Society. It is the success of the Proceedings over the past few years which has encouraged the Society to launch '*Animal Production*' on a broader basis of content and with a greater frequency of publication.

Initially the journal will appear twice per year (in March and September) and the annual subscription for two numbers is 30/- (\$5.00 in U.S.A. and Canada); single numbers will cost 17s. 6d. (\$2.75 in U.S.A. and Canada).

Orders for '*Animal Production*' should be sent, and cheques or money orders made payable to: Oliver and Boyd, Ltd., Tweeddale Court, High Street, Edinburgh, Scotland.

WORKING COMMITTEE REPORTS

No reports from any of the Working Committees have been received by the Editor for inclusion in this issue.

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BIBLIOGRAPHICAL NEWS

New Agricultural Bibliographies

Compiled by Rudolf Lauche

(*Braunschweig, Forschungsanstalt für Landwirtschaft*)

With assistance from Mrs. Margaret Bryant, U.S. Dept. of Agriculture Library, and other members of I.A.A.L.D. (Arranged as supplement to 'Internationales Handbuch der Bibliographien des Landbaues')

Series 4

1. Agriculture, general

1.11 Classification

Das System (des landwirtschaftlichen Zentralblattes). - Berlin: Akademie-Verlag 1958. 131 p. - Price 6,50 DM - Classification of the 4 parts of 'Landwirtschaftliches Zentralblatt': Agric. engineering - Agronomy, plant protection, horticulture - Livestock, bees and fisheries - Veter. science. To each part a subject index. (15b)

1.12 Documentation

Pataky, Ernő: A mezőgazdasági dokumentáció elméleti kérdései [Theoretical problems of the agricultural documentation]. - Budapest: Országos mezőgazdasági könyvtár 1958. 77 p. - With English summary (33a)

1.13 Dictionaries

Hungarian

Mezőgazdasági lexikon [Agricultural dictionary] 2 vol. - Budapest: Mezőgazdasági kiadó 1958. 712, 786 p. - In it: Szakirodalmi tájékoztató - A selected list of Hungarian and foreign books and periodicals with 930 items. - Classified (39c)

Russian

Sel'skhozozhajstvennaja enciklopedija. [Agricultural encyclopedia.] 3. ed. 5 vol. - Moskva: Sel'hozgiz 1949/56. 3187 p. - Mostly single articles with ref. - Also forestry, fisheries, veterinary science, biographies. - With index of latin terms of plants and animals. (39b)

1.41 Greater regions

Tropics

Tempany, Harold; D. H. Grist: An introduction to tropical agriculture. - London: Longmans Green 1958. 347 p. - Price 40 s - With 211 ref. (171b)

1.42 Countries

Austria

Feierliche Inauguration 1957/58 [= Annual report] - Wien: Hochschule für Bodenkultur 1957. 56 p. - In it: Publications 1955/57 - 344 ref. - Arranged by institutes. - Agriculture and forestry (403b)

Bulgaria

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BOOK REVIEWS

BLANCHARD, J. R. & OSTVOLD, H. *Literature of agricultural research*. Cambridge University Press, 1958. Pp. x, 231; price 37s. 6d.

This is the first of a series of 'Bibliographic Guides' sponsored by the libraries of the University of California and prepared mainly by the library staffs.

The entries are in seven main sections, serially numbered from A to G for reference purposes, namely: agriculture, general; plant sciences; animal sciences; physical sciences; food and nutrition; social sciences, and a 5-page Addendum of works noted too late for inclusion in the main body. The further subdivision of e.g. plant sciences (B) is into botany, horticulture and agronomy, plant breeding etc. Within this subdivision the entries are arranged in the following categories: bibliographies of bibliographies and general works; abstracting journals; bibliographies and indexes; encyclopedias; dictionaries, directories, handbooks, yearbooks, history and biography, societies and organizations, etc.

Each main section and many of the subdivisions are prefaced by a note explaining the selection policy and referring the reader to relevant works listed in other parts. Within each main section, e.g. plant sciences (B) all items are serially numbered, e.g. items under botany from B1 to B81, under horticulture and agronomy from B82 to B128 and so on.

There is a useful 55-page author and subject index, with the author's works listed by title under his name, with indication of the serial number of the item.

The authors have aimed to include only the more valuable reference tools, capable of guiding the reader to the other sources. The emphasis is naturally on American work but the more important United Kingdom and German reference sources are included, and there are a certain number of entries from other countries. The literature of the Near, Middle and Far East, and of the tropics generally, is only very lightly touched on. A notable absentee is the remarkable Russian abstract journal *Referativnyi Zhurnal* (section *Biologiya*) which is far and away the main source of information on current work in Russia and other Communist countries.

The book is thus intentionally somewhat narrower in scope than Lauche's *Internationales Handbuch* and within its scope is in parts less detailed. This in no way detracts from its value. It is a careful and well presented survey of an important human resource, a very

useful tool for information, comparatively inexpensive and very easy to use.

Minor mistakes and misprints are more numerous than one would expect in a book of this type. Thus, to mention only a few, in the first entry (A1 on p. 3) *Societas* appears as 'Societies'; in A19 and again on p. 215 *Schriftum* is spelt 'Schriftum'; in A65 *Européenne* appears as 'Européene'; in C58 we have 'frenzgebiete' instead of *grenzgebiete*; and in C228 *École Nationale Vétérinaire* appears as 'École National Vétérinaire'. But these blemishes may largely be due to the fact that the book is not printed but reproduced by a 'pro-printing' process, in which proof-reading in the accepted sense of the phrase is not possible.

W. D. BRIND

DENMAN, D. R. & others. *Bibliography of rural land economy and landownership 1900-1957: a full list of works relating to the British Isles and selected works from the United States and Western Europe*. By D. R. Denman, J. F. Q. Switzer and O. H. M. Sawyer. Cambridge University, Department of Estate Management, 1958. Pp. [12], 412; price 35s. Od.

This bibliography will assist all who are concerned with land-ownership, land management and land affairs generally, whether they be owners, farmers, professional consultants or government officials. Its scope is rural only and does not touch an urban landownership at all; agricultural economics, marketing and education come incidentally within its purview.

The focus of interest is Great Britain, and it attempts to include all books, articles, memoranda and periodicals published in Great Britain from 1900-1956 together with a few 1957 publications and a number of theses for higher degrees; but a certain number of United States books and articles on general themes have been included.

The main body of the work is classified under the following main headings: *a*) General historical works on the subject; *b*) General works; *c*) Rural economy (with 8 sub-headings); *d*) Land economy (with 6); *e*) Estate economy (with 21); *f*) Research and education (with 2); *g*) Reference works (with 4); *h*) Foreign works (with 7). An alphabetical list of authors, giving the titles of their works, follows; and finally there is a subject index.

The book is very well printed and most handsomely bound; its clear and generous lay-out assist its simple and lucid arrangement in making it a pleasure to use. The compilers would, I suggest, have done better to abbreviate their periodical-titles in conformity with the *World List of Scientific Periodicals*, even though not all the periodicals they cite appear in that work; many users of their book will be familiar with *World List* abbreviations, which should be regarded as standard for this country.

D. H. B.

GENERAL AND PERSONAL INFORMATION

EXCHANGE: OFFERS & REQUESTS

The Centre for Agricultural Documentation, Generaal Foulkesweg 1 A, Wageningen, Netherlands offers copies of the following *four* microcards (A-D) containing each a series of recently compiled bibliographical lists (numbers of references given in brackets). The Centre will be very pleased to receive in exchange for these micro-literature lists any non-published bibliographical material.

A. MICRO-LITERATURE LISTS 1958 (22-39)

- 1958-22 Grape growing in the Netherlands (28)
- 1958-23 Sheep slaughtering (7)
- 1958-24 Nitrogen in feed (49)
- 1958-25 Land socialisation (15)
- 1959-26 Influence of potassium on the botanical composition of grassland (31)
- 1958-27 Reed (24)
- 1958-28 Canary islands (17)
- 1958-29 Bulk handling of raw sugar (10)
- 1958-30 Diseases of pigs (144)
- 1958-31 Grain-damage by threshing (18)
- 1958-32 Agriculture in Belgium and the Netherlands; a comparison (25)
- 1958-33 Silkworm breeding (15) in Dutch
- 1958-34 The mole and its control (12)
- 1958-35 Influence of soil composition on flower colour (4)
- 1958-36 Agricultural Universities in Europe (36 institutions)
- 1958-37 Damage to crops by industrial gases (37) in Dutch
- 1958-38 Some Dutch publications on coffee growing (5)
- 1958-39 Agricultural labourers (30) Mostly Dutch.

B. MICRO-LITERATURE LISTS 1958 (40-57)

- 1958-40 Pigfeeding and diseases of pigs (551)
- 1958-41 Earth current and dowsing-rod (31)
- 1958-42 Frost damage in potatoes (9)
- 1958-43 Agricultural credit in Denmark (7)
- 1958-44 Regional land improvement programs (15) in Dutch
- 1958-45 Poultry dressing stations (7)
- 1958-46 Quality of pork and beef (11)

- 1958-47 Farm workers cottages (17) In Dutch
- 1958-48 Urea sprays (28)
- 1958-49 Lettuce growing in the Mediterranean region (23)
- 1958-50 Lettuce growing in the Mediterranean region (supplement) (11)
- 1958-51 Shetland pony breeding (11)
- 1958-52 Arabian horse breeding (8)
- 1958-53 Control of mushroom fly (19)
- 1958-54 Crossing of *Phaseolus radiatus* and *Vigna Simensis* (9)
- 1958-55 Peanut foliar diagnosis (11)
- 1958-56 Peanut crossing (17)
- 1958-57 Leafspot of peanut (55)

C. MICRO-LITERATURE LISTS 1958 (58-62)

- 1958-58 Amine-acid in cabbage (6)
- 1958-59 Dry lot feeding and whey for pigs (32)
- 1958-60 Storage and drying (grain, onions, beans, seeds, gladiolus) (285)
- 1958-61 Controlled climate in greenhouses (280) (general and tomatoes (280))
- 1958-62 Control of nematodes (28)

D. MICRO-LITERATURE LISTS 1958 (63-75)

- 1958-63 Land lease act. Dutch (28)
- 1958-64 Evolution of agricultural research in the Netherlands (25)
- 1958-65 Farming licenses in the Netherlands. Suppl. (20) In Dutch
- 1958-66 Modern haying methods (33) In Dutch
- 1958-67 Use of milk replacers for dairy calves (41)
- 1958-68 Enrichment plantings in tropical rain-forest (21)
- 1958-69 Milkpowder (10) In Dutch
- 1958-70 Long term rural extension (9)
- 1958-71 Tractors (books) (21)
- 1958-72 Increasing the feeding value of straw (46)
- 1958-73 Influence of macro- and micro-elements on the storage of apple and pear (213)
- 1958-74 Polyfactoranalysis (10)
- 1958-75 Dairy problem: production and consumption (16)

INSTITUTIONS & INDIVIDUALS

The American Phytopathological Society has for several years sponsored the publication of results from tests on new fungicides. The Results of 1957 Fungicide Tests have been printed privately and

may be obtained at \$1 per copy from Dr. A. B. Groves, Department of Plant Pathology and Physiology, Winchester Fruit Research Laboratory, Route 3, Winchester, Va.

The new address of the CCTA/CSA Secretariat as from 1 January 1959 is as follows: Abbey House, CCTA/CSA, 2-8 Victoria Street, London, S.W.1.

The European Agricultural Aviation Centre (E.A.A.C.) is an independent international, non-profit organization, which aims at promoting the use of aircraft and helicopters in European agriculture and forestry. It was established about half a year ago under the auspices of the O.E.E.C., and so far the governments of 10 European countries have joined it as members.

Among the numerous activities of the E.A.A.C., the informative aspect holds a prominent place. Via its *Quarterly Periodical* persons interested both in and outside the member-countries - manufacturers of agricultural chemicals, manufacturers of aircraft, operators, government officials and research institutes - are kept informed of any developments in agricultural aviation. That is why this publication is from the very outset distributed on a world-wide basis.

The new Plant Breeding Research Laboratories at Njoro, Kenya were opened on 29 August, 1958 by the Hon. Michael Blundell, M. B. E., Minister for Agriculture, Animal Husbandry and Water Resources.

FORTHCOMING CONGRESSES

Forestry. Fifth World Forestry Congress, University of Washington, Seattle, summer 1960. Dr. I. T. Haig, Fifth World Forestry Congress Organizing Cttee, Department of State, Washington 25, D.C.

Soil Science. 7th Internat. Congress of Soil Science, Madison, Wis., Summer 1960. Prof. Richard Bradfield, Dept of Agronomy, Cornell University, Ithaca, N.Y.

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ABBREVIATIONS

Compiled by

FREDERICK A. BUTTRESS

with the assistance of

GORDON HUGHES

(School of Agriculture, Cambridge, England)

Supplement No. 3.*

- AAC - Agrarische Adviescommissie (of NIBEM) (Netherlands)
AAF - Académie d'Agriculture de France
ACADI - Association des Cadres Dirigeants de l'Industrie pour le Progrès Sociale et Economique (France)
ACTA - Association de Coordination Technique Agricole (of FNSEA) (France)
ADEARTA - Association pour le Développement de l'Équipement des Ateliers de Réparation des Tracteurs Agricoles (France)
ADEXA - Association pour le Développement des Exportations Agricoles (France)
AEP - Agence Européenne de Productivité (of OECE)
AFEE - Association Française pour l'Etude des Eaux
AFES - Association Française pour l'Etude du Sol
AFF - Association Française du Froid
AFIA - Association Française Interprofessionnelle des Agrumes
AFJA - Association Française des Journalistes Agricoles
AFP - Agence France Presse
AFRAN - Association Française pour la Recherche de l'Alimentation Normale
AFZ - Association Française de Zootechnie
AGPH - Association Générale des Producteurs de Houblon (France)
AGPL - Association Générale des Producteurs de Lin (France)
APV - Association Générale des Producteurs de Viande (France)
Agra-Presse - Agency Générale de Renseignements Agricoles (France)
AIAF - Association de l'Industrie et de l'Agriculture Françaises
AIES - Association Internationale d'Essais de Semences (= ISTA)
AISS - Association Internationale de la Science du Sol (= ISSS)
ALF - Association Laitière Française pour le Développement de la Production et des Industries du Lait
AMA - Association Mondiale d'Agriculture Scientifique

* Grateful acknowledgement is made to the Chambres d'Agriculture, Paris for many of the French abbreviations in this supplement which appeared in their issue No. 158 (Documentation-Agricole No. 18), 15 Oct. 1958.

AMR - Association de Médecine Rurale (France)
AMRCB - Annales du Musée Royal du Congo Belge
ANAO - Association Nationale des Appellations d'Origine Agricole (France)
ANFMA - Association Nationale pour la Formation des Moniteurs Agricoles (France)
ANFPR - Association Nationale pour la Formation Professionnelle Rurale (France)
ANMF - Association Nationale de la Meunerie Française
ANPE - Association Nationale des Producteurs d'Endives (France)
APA - Association Parlementaire Agricole (France)
APCA - Air Pollution Control Authority (U.S.A.)
APCC - Assemblée des Présidents des Chambres de Commerce (France)
APCMF - Assemblée des Présidents des Chambres de Métiers de France
APECITA - Association pour l'Emploi des Cadres, Ingénieurs et Techniciens de l'Agriculture (France)
APPA - Association de Propagande pour les Produits Agricoles (France)
AREC - Amitié Rurale des Etudiants Catholiques (France)
ARSC - Académie Royales des Sciences Coloniales (Belgium)
ASBMT - Annales de la Société Belge de Médecine Tropicale
ASRZB - Annales de la Société Royale Zoologiques de Belgique
AVF - Académie Vétérinaire de France
BAC - Brouwtechnische Adviescommissie (Netherlands)
BDF - Banque de France
BFCE - Banque Français du Commerce Extérieur

BFR - Banque Fédérative Rurale (France)
BGD - Bureau voor Gemeenschappelijke Diensten (Netherlands)
BIS - Bureau Interafricain des Sols et de l'Economie Rurale (France)
BNA - Bureau de la Nutrition Animale (France)
BNIA - Bureau National Interprofessionnel de l'Armagnac (France)
BNIC - Bureau National Interprofessionnel du Cognac (France)
BRI - Banque des Règlements Internationaux
BUS - Bureau Universitaire de Statistique et de Documentations Scolaire et Professionnelle (France)
CA - Chambre d'Agriculture (France)
CACRMA - Caisse Autonome Centrale de Retraites Mutuelles Agricoles (France)
CAFA - Chambre Agricole Franco-Allemande
CAPEF - Coopérative Agricole des Producteurs d'Endives de France
CAPEM - Comité d'Aménagement et du Plan d'Equipement de la Moselle (France)
CAPER - Caisse d'Accession a la Propriété et à l'Exploitation Rurales (Algeria)
CBK - Centraal Brouwerij Kantoor (Netherlands)
CCAFMA - Caisse Centrale d'Allocations Familiales Mutuelles Agricoles (France)
CCAMAA - Caisse Centrale d'Assurances Mutuelles Agricoles contre des Accidents (France)
CCAMAG - Caisse Centrale d'Assurances Mutuelles Agricoles contre la Grêle (France)

- CCAMAI - Caisse Centrale d'Assurances Mutuelles Agricoles contre l'Incendie (France)
- CCAMAMB - Caisse Centrale d'Assurances Mutuelles Agricoles contre la Mortalité du Bétail (France)
- CCAVMA - Caisse Centrale d'Assurance Vieillesse Mutuelle Agricole (France)
- CCL - Comité Central de la Laine (France)
- CCPMA - Caisse Centrale de Prévoyance Mutuelle Agricole
- CCSMA - Caisse Centrale de Secours Mutuels Agricoles (France)
- CDCTM - Centro de Documentación Científica y Técnica de Mexico
- CDHR - Comité Départemental de l'Habitat Rural (France)
- CDJA - Cercle Départemental des Jeunes Agriculteurs (France)
- CDVPA - Comité Départemental de la Vulgarisation et du Progrès Agricole (France)
- CE - Conseil de l'Europe
- CE - Conseil d'Etat (France)
- CE - Conseil Economique (France)
- CEA - Centre d'Economie Alpine (France)
- CEBANOR - Comité Régional d'Expansion Economique de la Basse-Normandie (France)
- CEBSO - Comité d'Expansion Economique Bordeaux Sud-Ouest (France)
- CEC - Centre d'Etudes du Commerce (France)
- CECL - Comité Européen de Contrôle Laitier (France)
- CEDIA - Centre d'Etudes pour l'Extension des Débouchés Industriels de Agriculture (France)
- CEDUS - Centre d'Etudes et de Documentation pour l'Utilisation du Sucre (France)
- CEE - Communauté Economique Européenne
- CEEA - Communauté Européenne de l'Energie Atomique (Euratom)
- CEF - Commission Européenne des Forêts (Italy)
- CEF - Conservation des Eaux et Forêts (France)
- CEGOS - Commission d'Etudes Générales de l'Organisation Scientifique (France)
- CEIA - Coopérative d'Elevage et d'Insémination Artificielle (France)
- CEMA - Centre d'Etudes et de Modernisation Agricoles (France)
- CERAC - Comité d'Expansion Régionale et d'Aménagement de la Champagne (France)
- CERCA - Centre d'Enseignement Rural par Correspondance d'Angers (France)
- CERER - Comité d'Etudes et de Recherches Economiques Rurales (France)
- CERES - Comité d'Etudes Régionales Economiques et Sociales (France)
- CERMA - Centre d'Etudes et de Recherches du Machinisme Agricole (France)
- CERT - Comité de Roubaix-Tourcoing d'Etudes et d'Actions Economiques et Sociales (France)
- CES - Conseil Economique et Social (France)
- CESCO - Comité d'Expansion Economique du Centre-Ouest (France)
- CETA - Centres d'Etudes Techniques Agricoles (France)
- CETIOM - Centre Technique Interprofessionnel des Oléagineux Metropolitains (France)
- CFA - Comptoir Français de l'Azote

CFA - Confédération Française de l'Aviculture
CFF - Crédit Foncier de France
CLFL - Comptoir des Filasses de Lin Françaises
CFRAI - Comité Français des Relations Agricoles Internationales
CFRTI - Centre Français de Renseignements Techniques Industriels
CFS - Comptoir Français des Superphosphates
CFTC - Confédération Française des Travailleurs Chrétiens
CGA - Confédération Générale de l'Agriculture (France)
CGA - Conseil Général de l'Agriculture (France)
CGAD - Confédération Générale de l'Alimentation en Détail
CGAF - Confédération Générale de l'Artisanat Français
CGAP - Comité Général d'Action Paysanne (France)
CGC - Confédération Générale des Cadres (France)
CGCA - Confédération Générale des Cooperatives Agricoles (France)
CGIC - Comité Général Interprofessionnel Chanvrière (France)
CGP - Commissariat Général au Plan (France)
CGPCC - Confédération Générale des Planteurs de Chicorée à Café (France)
CGPFL - Confédération Générale des Producteurs de Fruits et Légumes (France)
CGPME - Confédération Générale des Petites et Moyennes Entreprises (France)
CGPPT - Confédération Générale des Producteurs de Pommes de Terre (France)
CGPT - Confédération Générale des Paysans Travailleurs (France)
CGSI - Confédération Générale

des Syndicats Indépendants (France)
CGT - Compagnie Générale Transatlantique (France)
CGT-FO - Confédération Générale du Travail Force Ouvrière (France)
CGV - Confédération Générale des Vignerons (France)
CGVCO - Confédération Générale des Vignerons du Centre-Ouest (France)
CGVM - Confédération Générale des Vignerons du Midi (France)
CGVSO - Confédération Générale des Vignerons du Sud-Ouest (France)
CIB - Conseil International du Blé
CIC - Commission Internationale du Châtaignier (of FAO)
CIC - Confédération Internationale de Défense du Cheval
CIC - Conseil International de la Chasse
CIJ - Cour Internationale de Justice
CIID - Commission Internationale des Irrigations et du Drainage
CILB - Comité Interprofessionnel du Lait de Brebis (France)
CILC - Confédération Internationale du Lin et du Chanvre (France)
CIP - Commission Internationale de Phytopharmacie (France)
CIPC - Comité International Permanent de la Conserve (France)
CISIR - Ceylon Institute of Scientific and Industrial Research
CITCE - International Committee of Electrochemical Thermodynamics and Kinetics
CIVAS - Comité Interprofessionnel des Vins d'Anjou-Saumur (France)
CIVB - Comité Interprofessionnel des Vins de Bergerac (France)
CIVB - Comité Interprofessionnel

des Vins de Bordeaux (France)
CIVB - Comité Interprofessionnel de la Volaille de Bresse (France)
CIVC - Comité Interprofessionnel des Vins de Champagne (France)
CIVCR - Comité Interprofessionnel des Vins des Côtes-du-Rhône (France)
CIVDN - Comité Interprofessionnel des Vins Doux Naturels (France)
CIVPN - Comité Interprofessionnel des Vins du Pays Nantais (France)
CIVT - Comité Interprofessionnel des Vins de Touraine (France)
CJP - Centre des Jeunes Patrons (France)
CLF - Comité Linier de France
CLIMMAR - Centre de Liaison International des Marchands de Machines Agricoles et Réparateurs (France)
CM - Chambre des Métiers (France)
CMA - Crédit Mutuel Agricole (France)
CNA - Confédération Nationale de l'Artisanat (France)
CNAA - Comité National d'Action Agricole (France)
CNAM - Conservatoire National des Arts et Métiers (France)
CNB - Confédération Nationale de la Boulangerie et Boulangerie Pâtisserie (France)
CNBF - Confédération Nationale de la Boucherie Française
CNC - Conseil National de Commerce (France)
CNCA - Centre National de la Coopération Agricole (France)
CNCATA - Centre National Coopératif Agricole de Traitements Antiparasitaires (France)
CNCE - Centre National du Commerce Extérieur (France)
CNCF - Confédération Nationale de la Charcuterie de France

CNCIA - Confédération Nationale des Commerces et Industries de l'Alimentation (France)
CNCV - Confédération Nationale des Coopératives Vinicoles (France)
CNEAF - Confédération Nationale des Experts Agricoles et Fonciers (France)
CNEEMA - Centre National d'Etudes et d'Experimentation de Machinisme Agricole (France)
CNERIA - Centre National d'Etudes et de Recherches des Industries Agricoles (France)
CNHR - Comité National de l'Habitat Rural (France)
CNIB - Confédération Nationale des Industries du Bois (France)
CNIH - Comité National Interprofessionnel du Houblon (France)
CNIPBC - Comité National Interprofessionnel des Produits de Basse-Cour (France)
CNIPT - Comité National Interprofessionnel de la Pomme de Terre (France)
CNIR - Centre National Interprofessionnel du Rhum (France)
CNJA - Cercle National des Jeunes Agriculteurs (France)
CNMCCA - Confédération Nationale de la Mutualité, du Crédit et de la Coopération Agricoles (France)
CNP - Corporation Nationale Paysanne (France)
CNP - Comité National des Prix (France)
CNPF - Conseil National du Patronat Français
CNPS - Confédération Nationale des Produits du Sol et Dérivés (France)
CNPV - Comité National de Propaganda en faveur du Vin

(France)
CNRZ - Centre National de Recherches Zootechniques (France)
CNVS - Confédération Nationale des Industries et Commerce en Gros des Vins et Spiritueux de France
COC - Commission Officielle de Contrôle (des semences et plants) (France)
CPA - Comité Permanent Agricole (France)
CPA - Centre de Préparation aux Affaires (France)
CPCEA - Caisse de Prévoyance des Cadres d'Exploitations Agricoles (France)
CRÉE - Comité Régional d'Expansion Economique de l'Auvergne (France)
CREDOC - Centre de Recherches et de Documentation sur la Consommation (France)
CREGR - Centre de Recherches et d'Expérimentation de Génie Rural (France)
CRES - Centre de Recherches Economiques et Sociales (France)
CRIEL - Comité Interprofessionnel des Eaux-de-vie du Languedoc (France)
CSA - Conseil Supérieur de l'Agriculture (France)
CSMA - Caisse de Secours Mutuels Agricoles (France)
CTB - Centre Technique du Bois (France)
CTI - Confédération des Travailleurs Intellectuels (France)
CTIFL - Centre Technique Interprofessionnel des Fruits et Légumes (France)
CTIOM - Centre Technique Interprofessionnel des Oléagineux Métropolitains (France)
DGA - Direction Générale de l'Agriculture (France)

DGEF - Direction Générale des Eaux et Forêts (France)
DGGR - Direction Générale du Génie et de l'Hydraulique Agricole (France)
DNGE - Direccion Nacional de Granos y Elevadores (Argentina)
EAAC - European Agricultural Aviation Centre
EAC - Etudes Agricoles par Correspondance (France)
EDF - Electricité de France. Direction Générale
ENEF - Ecole Nationale des Eaux et Forêts (France)
ENEMA - Ecole Nationale d'Enseignement Ménager Agricole, à Rennes (France)
ENGR - Ecole Nationale du Génie Rural (France)
ENH - Ecole Nationale des Haras (France)
ENH - Ecole Nationale d'Horticulture (France)
ENIA - Ecole Nationale des Industries Agricoles (France)
ENSAN - Ecole Nationale Supérieure Agronomique de Nancy (France)
ENV - Ecoles Nationales Vétérinaires (France)
ERA - Ecole Régionale d'Agriculture (France)
EURATOM - Organisation Atomique Européenne
EXPAINSO - Société de Développement du Sud-Ouest (France)
EXPANENTRE - Société pour l'Expansion Economique de la Région du Centre (France)
FACA - Fédération Algérienne de la Cooperation Agricole
FACFF - Fédération des Associations de Communes Forestières Françaises
FBA - Farm Building Association (U.K.)
FCCAM - Fédération Centrale du

- Crédit Agricole Mutuel (France)
- FCMRF** - Fédération des Centres Musicaux Ruraux de France
- FDES** - Fonds de Développement Economique et Social (France)
- FENNOBOARD** - Finnish Wall-board Industry Association
- FEPA** - Fédération de l'Enseignement Privé Agricole (France)
- FEROPA** - Fédération Européenne des Syndicats de Panneaux de Fibres
- FFNFPMAP** - Fédération Familiale Nationale pour la Formation Professionnelle et Ménagère Agricole Privée (France)
- FFSU** - Fédération Française des Stations Uvales (France)
- FGMOPA** - Fonds de Garantie Mutuelle et d'Orientation de la Production Agricole (France)
- FIAP** - Fédération Internationale des Architectes Paysagistes (France)
- FIDOM** - Fonds d'Investissement et de Développement Economique des Départements d'Outre-Mer (France)
- FIDOR** - Fibre Building Board Development Organization Ltd (U.K.)
- FNCAC** - Fédération Nationale des Coopératives Agricoles de Céréales (France)
- FNCAUMA** - Fédération Nationale des Coopératives d'Achat et d'Utilisation de Matériel Agricole (France)
- FNCB** - Fédération Nationale des Commerçants en Bestiaux de France
- FNCB** - Fédération Nationale des Coopératives Agricoles de Transformation de la Betterave Industrielle (France)
- FNCC** - Fédération Nationale des Coopératives Cidricoles (France)
- FNCC** - Fédération Nationale des Coopératives de Consommation (France)
- FNCCRE** - Fédération Nationale des Collectivités Concédantes de Régies Électriques (France)
- FNCETA** - Fédération Nationale des Centres d'Études Techniques Agricoles (France)
- FNCFP** - Fédération Nationale des Coopératives Agricoles de Fruits, primeurs, fleurs et autres produits Agricoles (France)
- FNCG** - Fédération Nationale des Centres de Gestion (France)
- FNCH** - Fédération Nationale des Coopératives d'Huilerie (France)
- FNCHR** - Fédération Nationale des Coopératives d'Habitat Rural (France)
- FNCL** - Fédération Nationale des Coopératives Lainières (France)
- FNCBPV** - Fédération Nationale des Coopératives de Producteurs de Bétail et de Viande (France)
- FNCPVRT** - Fédération Nationale des Coopératives de Production et de Vente des Raisins de Table (France)
- FNCA** - Fédération Nationale du Crédit Agricole (France)
- FNCISO** - Fédération Nationale des Coopératives de Stockage d'Oléagineux (France)
- FNDCV** - Fédération Nationale des Distilleries Coopératives Viniçoles (France)
- FNDPL** - Fédération Nationale des Détaillants en Produits Laitiers (France)
- FNETA** - Fédération Nationale des Entrepreneurs de Travaux Agricoles de France
- FNFR** - Fédération Nationale des Foyers Ruraux (France)
- FNG** - Fédération Nationale du Genêt (France)
- FNGAA** - Fédération Nationale des Groupements Agricoles

d'Approvisionnement (France)
FNGDSB - Fédération Nationale des Groupements de Défense Sanitaire du Bétail (France)
FNGFS - Fédération Nationale des Graines Fourragères de Semence (France)
FNGPA - Fédération Nationale des Groupements de Productivité Agricole (France)
FNGPC - Fédération Nationale des Groupements de Protection des Cultures (France)
FNICG - Fédération Nationale de l'Industrie des Corps Gras (France)
FNIL - Fédération des Syndicats d'Industriels Laitiers (France)
FNMCCA - Fédération Nationale de la Mutualité du Crédit et de la Coopération Agricoles (France)
FNO - Fédération Nationale Ovine (France)
FNOMI - Fédération Nationale des Organismes de Migrations Intérieures (France)
FNP - Fédération Nationale de la Pisciculture (France)
FNP - Fédération Nationale Porcine (France)
FNPBRF - Fédération Nationale des Producteurs de Bois et Reboiseurs Français
FNPC - Fédération Nationale des Producteurs de Chanvre (France)
FNPF - Fédération Nationale des Producteurs de Fraises (France)
FNPF - Fédération Nationale des Producteurs de Fruits (France)
FNPF - Fédération Nationale des Producteurs de Fruits à Cidre (France)
FNPHP - Fédération Nationale des Producteurs de l'Horticulture et des Pépinières (France)
FNPTC - Fédération Nationale des Producteurs de Pommes de Terre de Consommation (France)

FNPPTI - Fédération Nationale des Producteurs de Pommes de Terre Industrielles (France)
FNPSM - Fédération Nationale des Producteurs de Semences de Maïs (France)
FNPT - Fédération Nationale des Planteurs de Tabac (France)
FNPT - Fédération Nationale des Producteurs de Topinambours (France)
FNSA - Fédération Nationale des Sinistrés Agricoles (France)
FNSACC - Fédération Nationale des Syndicats Agricoles des Cultivateurs de Champignons (France)
FNSDPL - Fédération Nationale des Syndicats de Détaillants en Produits Laitiers (France)
FNSFPA - Fédération Nationale des Syndicats de Fabricants de Pâtes Alimentaires (France)
FNSICAE - Fédération Nationale des Sociétés d'Intérêt Collectif Agricole d'Electricité (France)
FNSIA - Fédération Nationale des Syndicats des Industries de l'Alimentation (France)
FNSIAA - Fédération Nationale des Syndicats des Industries de l'Alimentation Animale (France)
FNSIL - Fédération Nationale des Syndicats d'Industriels Laitiers (France)
FNSITCEAA - Fédération Nationale des Syndicats d'Ingenieurs, Techniciens, Cadres Administratifs et Employés des Organisations Agricoles de l'Agriculture (France)
FNSPFS - Fédération Nationale des Syndicats de Propriétaires Forestiers Sylviculteurs (France)
FNSPPTCQC - Fédération Nationale des Syndicats des Producteurs de Pommes de Terre de Consommation de Qualité Contrôlée (France)

- FNSPV** - Fédération Nationale des Syndicats de Pépiniéristes Viticulteurs (France)
- FNSUTL** - Fédération Nationale des Syndicats Utilisateurs et Transformateurs de Lait (now FNSIL) (France)
- FNTAF** - Fédération Nationale des Travailleurs de l'Agriculture et des Forêts de France et d'Outremer.
- FNTCA** - Fédération Nationale des Techniciens et Cadres de l'Agriculture (CGA) (France)
- FSAC** - Folia Scientifica Africæ Centralis
- FSLTT** - Fédération des Syndicats Libres des Travailleurs de la Terre (CFTC) (France)
- CDF** - Gaz de France
- GIPFA** - Groupement Interprofessionnel des Plantes à Parfum et Aromatiques (France)
- GIRPIA** - Groupements Interprofessionnels de Répartition des Produits Indispensables à l'Agriculture (France)
- GNA** - Groupement National d'Achat (France)
- GNIAA** - Groupement National des Industries de l'Alimentation Animale (France)
- GNIBC** - Groupement National Interprofessionnel de la Bette-rave, de la Canne et des Industries productrices de Sucre et d'Alcool (France)
- GNIL** - Groupement National Interprofessionnel Linier (France)
- GNIPT** - Groupement National Interprofessionnel de la Pomme de Terre (France)
- GNIT** - Groupement National Interprofessionnel du Topinambour (France)
- GPA** - Groupement de Productivité Agricole (France)
- IAB** - Institut Agricole de Beauvais (Oise) (France)
- IDLIS** - International Desert Locust Information Service
- IFA** - Institut for Atomenergi (Norway)
- IFA** - Institut Français de l'Alcool (France)
- IFCC** - Institut Français du Café, du Cacao et autres plantes stimulantes (France)
- IHEA** - Institut des Hautes Etudes Agraires (France)
- IHEDR** - Institut des Hautes Etudes de Droit Rural (France)
- IICA** - Instituto Interamericano de Ciencias Agrícolas
- ILSA** - Inspection des Lois Sociales en Agriculture (France)
- INB** - Institut National du Bois (France)
- INCIDI** - International Institute of Differing Civilisations
- INGE** - Instituto Nacional de Granos y Elevadores (Argentina)
- INTA** - Instituto Nacional de Tecnología Agropecuaria (Argentina)
- INTERLAIT** - Société Interprofessionnelle du Lait (France)
- IRCA** - Institut de Recherches sur le Caoutchouc en Afrique (France)
- ISSS** - International Society of Soil Science
- ITPA** - Institut Technique de Pratique Agricole (France)
- ITV** - Institut Technique du Vin (France)
- IVCC** - Institut des Vins de Consommation Courante (France)
- IWS** - International Wool Secretariat
- IWSG** - Groupe International d'Etude sur la Laine
- JACF** - Jeunesse Agricole Catholique Féminine (France)
- JENER** - Joint Establishment for Nuclear Energy Research (Netherlands-Norway)

JICST - Japan Information Centre of Science and Technology
JTUAC - Joint Trade Union Advisory Committee

KDS - Khuzistan Development Service

LADSIRLAC - Liverpool and District Scientific, Industrial and Research Advisory Council (U.K.)

LCFTA - London Cattle Food Trade Association

MAA - Maison de l'Agriculture Algérienne

MADA - Muscular Dystrophy Associations of America, Inc.

MDPA - Mines Domaniales de Potasse d'Alsace (France)

ME - Mouvement Européen

MFAR - Maison Familiale d'Apprentissage Rural (France)

MFR - Mouvement Familial Rural (France)

MIDEC - Middle East Industrial Projects Corporation

MRL - Ministère de la Reconstruction et du Logement (France)

MSA - Mutualité Sociale Agricole (France)

NAAC - National Association of Agricultural Contractors (U.K.)

NASA - National Aeronautics and Space Administration (U.S.A.)

NIOC - National Iranian Oil Company

NOE - Laboratoire Coopératif National des Eleveurs (France)

NUCR - Nouvelle Union Corporative des Résineux (France)

NUFFIC - Netherlands University Foundation for International Co-operation

OAD - Offices Agricoles Départementaux (sopprimés) (France)

OCAA - Office Central des Asso-

ciations Agricoles du Finistère et des Côtes-du-Nord (France)

OCIC - Office Chérifien Interprofessionnel des Céréales (France)

OCRPI - Office Central de Répartition des Produits Industriels (France)

OMC - Organisation Mondiale du Commerce (UNO)

ONI - Office National d'Immigration (France)

ONG - Organisations Non Gouvernementales

OTAN - Organisation du Traité de l'Atlantique-Nord (NATO)

OVAC - Oversea Visual Aids Centre (U.K.)

PANSDOC - Pakistan National Scientific Documentation Centre

PCSIR - Pakistan Council of Scientific and Industrial Research

PIA - Pakistan International Airways

PME - Petites et Moyennes Entreprises (France)

PTT - Postes, Télégraphes, Téléphones (France)

RATP - Régie Autonome des Transports Parisiens (France)

RCN - Reactor Centrum Nederland

RZBA - Revue de Zoologie et de Botanique Africaines

SAF - Société des Agriculteurs de France

SAMDA - Société Agricole Mutuelle d'Assurance (France)

SAMPA - Services d'Approvisionnement en Moyens de Production Agricole (France)

SAP - Société Agricole de Prévoyance (France)

SARL - Société à Responsabilité Limitée (France)

- SCAF - Société Centrale d'Aviculture de France
- SCATS - Southern Counties Agricultural Trading Society (U.K.)
- SCIDT - Scottish Country Industries Development Trust
- SCIR - Syndicat Central d'Initiatives Rurales (France)
- SCPA - Société Commerciale des Potasses d'Alsace (France)
- SCRAL - Sociedad Cooperativa Rural Argentina Ltd.
- SDA - Syndicat de la Distillerie Agricole (France)
- SDN - Société des Nations (replaced by UNO)
- SDR - Société de Développement Régional (France)
- SEDA - Société d'Editions Documentaires Agricoles (France)
- SEIN - Société d'Encouragement pour l'Industrie Nationale (France)
- SESD - Society of Experimental Station Directors (U.S.A.)
- SFEA - Société Française d'Etudes Agricoles (France)
- SFER - Société Française d'Economie Rurale (France)
- SG - Société Générale (France)
- SGCTMA - Syndicat Général des Constructeurs et Machines Agricoles (France)
- SHCF - Saint Hubert Club de France
- SHR - Société Hippique Rurale (France)
- SIBEV - Société Interprofessionnelle du Bétail et des Viandes (France)
- SICA - Société d'Intérêt Collectif Agricole (France)
- SICAE - Société d'Intérêt Collectif Agricole d'Electricité (France)
- SICHR - Société d'Intérêt Collectif d'Habitat Rural (France)
- SICOD - Service Interconsulaire du Commerce et de la Distribution (France)
- SIL - Secrétariat International de la Laine (IWS)
- SILIN - Société Interprofessionnelle des Graines et Huiles de Lin (France)
- SIMA - Salon International de la Machine Agricole
- SIOFA - Société Interprofessionnelle des Oléagineux Fluides Alimentaires (France)
- SIRT - Société Interprofessionnelle du Raison de Table (France)
- SISS - Société Internationale de la Science du Sol
- SITMA - Société des Ingénieurs et Techniciens du Machinisme Agricole (France)
- SITOF - Société des Industries de Transformation des Oléagineux Fluides Alimentaires (France)
- SJPA - Syndicat des Journalistes de la Presse Agricole (France)
- SNA - Société Nationale d'Acclimatation (France)
- SNC - Syndicat National des Cidriers et Fabricants d'Eau-de-Vie de Cidre (France)
- SNCEA - Syndicat National des Cadres d'Exploitations Agricoles (CGA) (France)
- SNCEO - Syndicat National des Cadres et Employés des Organisations Agricoles (CGA) (France)
- SNEA - Société Nationale d'Encouragement à l'Agriculture (France)
- SNFEV - Syndicat Français des Eleveurs de Visons (France)
- SNFM - Section Nationale des Fermiers et des Métayers (France)
- SNFS - Syndicat National des Fabricants de Sucre (France)
- SNHF - Société Nationale d'Horticulture de France
- SNIP - Syndicat National Interprofessionnel de Porc (France)

SNIPOT - Société Nationale Interprofessionnelle de la Pomme de Terre (France)
SNMRMA - Syndicat National des Marchands Réparateurs de Machines Agricoles (France)
SNPA - Syndicat National de la Presse Agricole et du Monde Rural (France)
SNPEP - Syndicat National Professionnel des Engrais Phosphatés (France)
SNPPM - Syndicat National des Producteurs de Plantes Médicinales (France)
SNST - Société Nationale pour la Vente des Scories Thomas (France)
SOBIPO - Société Bretonne Interprofessionnelle de la Pomme de Terre (France)
SODEL - Société pour Développement des Applications de l'Electricité (France)
SOF - Syndicat des Osiéristes Français
SONITO - Société Nationale d'Intervention sur le Marché de la Tomate (France)
SPAI - Service Professionnel Agricole International (APPCA)
SPIEA - Syndicat Professionnel de l'Industrie des Engrais Azotés (France)
STIL - Service Technique Interprofessionnel du Lait (France)
SYFAC - Syndicat des Fabricants d'Aliments Composés pour l'Alimentation Animale (France)
SYNACOMEX - Syndicat National du Commerce Extérieur des Céréales (France)
SYNCOPAC - Syndicat National des Coopératives Préparant des Aliments Composés (France)
SYNCOPEX - Syndicat National des Coopératives Agricoles Exportatrices (France)

SYNERVA - Syndicat National d'Etudes de Revision et de Vulgarisation des Coopératives Agricoles (France)
TOFINSO - Société Toulousaine Financière et Industrielle du Sud-Ouest (France)
TPG - Trésorier Payeur General (France)
UCSAF - Union Centrale des Syndicats Agricoles de France
UECB - Union Européenne des Commerces du Bétail
UECR - Union des Ententes et Communautés Rurales (France)
UEMOA - Union des Exposants de Machines et d'Outillage Agricoles (France)
UEO - Union de l'Europe Occidentale
UFCAC - Union Fédérale des Coopératives Agricoles de Céréales (France)
UFC - Union Fédérale de la Consommation (France)
UFEA - Union Française pour l'Equipeement Agricole
UFI - Union des Foires Internationales (France)
UFSS - Union Française des Syndicats Sericoles (France)
UGCAA - Union Générale des Coopératives Agricoles d'Approvisionnement (France)
UGCAC - Union Générale des Coopératives Agricoles de Céréales (France)
UGSBF - Union Générale des Syndicats de la Brasserie Française
UIAF - Union Interprofessionnelle de l'Angora Français
UIOF - Union Internationale des Organismes Familiaux
UIP - Union Internationale Pay-sanne
UIIRF - Union Internationale des Instituts de Recherches Forestières (IUFRO)

- UNAF - Union Nationale de l'Apiculture Française
- UNAF - Union Nationale des Associations Familiales (France)
- UNAFR - Union Nationale des Aides Familiales Rurales (France)
- UNCAA - Union Nationale des Coopératives Agricoles d'Approvisionnement (France)
- UNCAFL - Union Nationale des Coopératives Agricoles de Fruits et Légumes (France)
- UNCAMB - Union Nationale des Coopératives Agricoles de Meunerie et de Meunerie-Boulangerie (France)
- UNCDC - Union Nationale des Caves et Distilleries Coopératives (France)
- UNCEIA - Union Nationale des Coopératives d'Elevage et d'Insemination Artificielle (France)
- UNCL - Union Nationale des Coopératives Laitières (France)
- UNCVDC - Union Nationale des Coopératives Viticoles et Distilleries Coopératives (France)
- UNEAP - Union Nationale de l'Enseignement Agricole Privé (France)
- UNEESA - Union Nationale des Etudiants de l'Enseignement Supérieur Agricole (France)
- UNEP - Union Nationale des Eleveurs de Porcs (France)
- UNIA - Union Nationale des Industries Agricoles (France)
- UNIA - Union Nationale des Ingénieurs Agricoles (France)
- UNIBEV - Union Nationale Interprofessionnelle du Bétail et des Viandes (France)
- UNICETA - Union Nationale des Ingénieurs des Centres d'Etudes Techniques Agricoles (France)
- UNICID - Union Nationale Interprofessionnelle Cidricole (France)
- UNIFL - Union Nationale Interprofessionnelle des Fruits et Légumes (France)
- UNMFAR - Union Nationale des Maisons Familiales d'Apprentissage Rural (France)
- UNOAI - Union Nationale des Ouvriers Agricoles Indépendants (France)
- UNOCCER - Union Nationale des Offices de Comptabilité et des Centres d'Economie Rurale (France)
- UNSE - Union Nationale des Syndicats de l'Etang
- UOF - Union Ovine de France
- URSSAF - Union pour le Recouvrement des Cotisations de la Sécurité Sociale et les Allocations Familiales (France)

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A NOTE ON THIS QUARTERLY BULLETIN

The editorial office is at the Library, Rothamsted Experimental Station, Harpenden, Herts., England.

Communications regarding it should be sent to Mr. D. H. Boalch at that address.

News in the field of the bibliography and documentation of agriculture and allied subjects is welcomed. Short articles (about 1500 words) and letters to the Editor will be published in the Quarterly Bulletin from time to time; these should be in English, French, German, or Spanish. Articles, in whatever language they are written, should have an English summary.

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